

ABSTRACT

A hollow carbon nanoballoon structure having a relatively large closed space, and a method of producing a carbon nanoballoon structure capable of easily and stably producing such a structure. The carbon nanoballoon structure is obtained by heating 5 soot prepared by arc discharge using carbon electrodes, soot prepared by vaporizing carbon by laser irradiation, or carbon black having a specific surface area of $1000 \text{ m}^2/\text{g}$ or more and a primary particle diameter of 20 nm or more at a high temperature in an inert gas atmosphere, and includes graphite sheets linked to form a curved surface.